

## ABSTRACT

A computing section 700v computes a reference revolution-speed decrease modification amount DNLR corresponding to a revolution speed modification gain KNP based on a pump-delivery-pressure maximum value signal PDMAX. A computing section 700g multiplies an engine revolution speed modification gain KNL by a reference revolution-speed decrease modification amount DNL and then DNLR, to thereby compute an engine revolution-speed decrease modification amount DND based on input change of an operation pilot pressure, which is modified in accordance with DNLR. At the time when a lever operation input from operation command means is changed from full stroke to half stroke, if a pump delivery pressure is in a pressure range of a pump absorption torque control region Y where the pump delivery pressure is lower than that in a region X, the reference revolution-speed decrease modification amount computing section 700v computes the modification amount DNLR to be 0, and therefore lowering of a target engine revolution speed with auto-acceleration control is not caused. A control system can ensure an energy saving effect, realize effective utilization of engine output power, and increase working efficiency by increasing and decreasing the engine revolution speed with an implement, e.g., auto-acceleration control, other than input means such as a throttle dial.